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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/715,714

11/17/2000

Joseph H. Sklar

INNO-31

6629

7590

09/04/2003

Pandiscio & Pandiscio
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Waltham, MA 02451-1914

EXAMINER

SNOW, BRUCE EDWARD

ART UNIT

PAPER NUMBER

3738

DATE MAILED: 09/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/715,714

Applicant(s)

HAYS ET AL.

Examiner

Bruce E Snow

Art Unit

3738

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 21-25 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-15, 19 and 20 is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☒ Claim(s) 16-18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other:

DETAILED ACTION

Priority

Applicant has amended the priority of this application. It is noted that the claimed subject matter is not supported totally in the previous applications; the filing date of all claims are 11/17/00.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1, 7, and 13, it is unclear as to the scope of the new limitation. The new limitation, "and the planar end surface extends from.. central axis" is ambiguous. Does this language actually claim the slot in the proximal end shown in figure 1?

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 5-7, 11-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Riesser et al (6,387,129) or, in the alternative, under 35 U.S.C. 103(a) as obvious over Riesser et al (6,387,129) in view of Ross et al (5,470,334).

Riesser et al teaches a fixation screw for fastening a graft ligament within a bone tunnel having a proximal end canted relative a longitudinal axis. See reasoning for canted end in column 4, lines 7-11. Said proximal end defines a generally planar end

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surface. Inherently, the planar distal end surface can be divided into a first portion and a second portion to define a linear axis therebetween.

In the alternative (Claims are rejected under 35 U.S.C. 103(a) as being unpatentable over Riesser et al (6,387,129) in view of Ross et al (5,470,334)).

Riesser et al teaches a fixation screw for fastening a graft ligament within a bone tunnel having a proximal end canted relative a longitudinal axis. See reasoning for canted end in column 4, lines 7-11. Said proximal end defines a generally planar end surface having a hexagonal socket. However, Riesser et al is silent regarding end surface having a "linear axis therebetween" defined by first and second portions.

Ross et al teaches a fixation screw wherein it is known in the art that most screws have either a transverse slot or hexagonal socket formed therein to engage, respectively, a similarly configured, single blade or hexagonal driver for turning the screw into a bone; see column 1, lines 35 et seq. It would have been obvious to one having ordinary skill in the art to have substituted the well known transverse slot of Ross et al for the hexagonal socket of Riesser et al as known mechanical substitutes also, wherein the transverse slot is easier and cheaper to manufacture. The combination fulfills all claim language.

Additionally, applicant specification lacks any criticality for the "*and the planar end surface extends from.. central axis*" (which is interpreted as the transverse slot) and gives no advantage over the hexagonal socket of Riesser et al and is considered merely a obvious matter of design choice known in the art.

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Claims 15 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beck, Jr. et al (5,632,748) in view of Mahony, III (5,282,802).

Referring to figure 10, Beck Jr. et al teaches a tubular body 416 having a bore therethrough and comprising a deformable wall; and a fixation screw 28 for insertion into said tubular body to expand said body to anchor a ligament. However, Beck fail to teach a planar end surface of the screw disposed at a canted angle relative an longitudinal axis.

Mahony, III teaches a fixation screw 10 also for securing a ligament wherein any excess projecting beyond the surface of the bone is trimmed off. It would have been obvious to one having ordinary skill in the art to have utilized the teachings of Mahony, III of trimming the screw of Beck such that the screw presents a is flush surface which is less irritating to adjacent tissue.

Allowable Subject Matter

Claims 16-18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 2-4, 8-10 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments filed 8/18/03 have been fully considered but they are not persuasive and are believed to be adequately described in the grounds of rejection above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bruce E Snow whose telephone number is (703) 308-3255. The examiner can normally be reached on Mon-Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Corrine McDermott can be reached on (703)308-2111. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3590 for regular communications and (703) 305-3590 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0858.

bes
August 28, 2003

A handwritten signature in black ink, consisting of a series of loops and a long horizontal line extending to the right.

**BRUCE SNOW
PRIMARY EXAMINER**